



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,738	02/28/2002	Kevin S. Weadock	15314 (ETH-1636)	8872
7590 06/24/2008 Scully, Scott, Murphy & Presser 400 Garden City Plaza Garden City, NY 11530				
EXAMINER ERIZO, DARWIN P				
ART UNIT		PAPER NUMBER		
3773				
MAIL DATE		DELIVERY MODE		
06/24/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/085,738

Applicant(s)

WEADOCK ET AL.

Examiner

Darwin P. Erezzo

Art Unit

3773

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 14-43 is/are pending in the application.
- 4a) Of the above claim(s) 3, 10-11, 16-28, 34-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1, 2, 4-9, 14, 15, 29-33 and 38-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 3773

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 3/14/08, with respect to the rejection(s) of claim(s) 1 and 29 under 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is provided below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

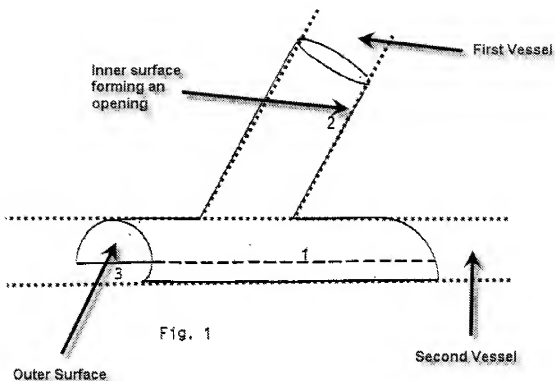
4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1,4-9,14,15,29-33 and 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,743,243 to Roy et al. and in view of US 6,726,923 to Iyer et al.

(claim 1) Roy discloses a device for creating an end to side anastomosis between vessels, the device comprising an extravascular body (shown in Fig. 1) having an inner surface and outer surface (as seen in the figure below), and adhesives on the inner surfaces of the first tubular member **1** and the inner surface of the second tubular member **2** (col. 5, lines 23-26).

Roy is silent with regards to the body being fabricated from a resorbable sponge. However, Iyer discloses that it is known to form anastomosis support devices from biocompatible, biodegradable, resorbable matrix material such as collagen, which can be made into a sponge material (col. 8, ll. 56-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the device of Roy from collagen because collagen can be used to imbibe a drug in order to provide medicaments to the anastomosis site.



(claims 4-6) The inner surface of the tubular element 2 is provided with adhesive to seal the element onto the vessel, wherein a balloon catheter is used to attach the tubular element to the blood vessel (col. 6, ll. 7-9).

(claims 7-9) The inner surface of tubular element 1, which becomes the outer surface of the device since the tubular element 1 is a half-crescent tube, is provided with adhesives. Therefore, the modification to form the device of collagen will also have adhesives be located on the collagen.

(claims 14 and 15) The modified device of Roy will be formed with the collagen disclosed by Iyer, which includes a medicament, such as an anastomosis modulating agent (see abstract).

(claim 29) Roy discloses a method comprising adhesively attaching the device of claim 1 to a first and second vessels to create an anastomosis site between the two vessels. Roy is silent with regards to the body being fabricated from a resorbable sponge. However, Iyer discloses that it is known to form anastomosis support devices from biocompatible, biodegradable, resorbable matrix material such as collagen, which can be made into a sponge material (col. 8, ll. 56-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the device of Roy from collagen because collage can be used to imbibe a drug in order to provide medicaments to the anastomosis site.

(claims 30, 31 and 38-41) The first vessel is attached to the body opening via adhesives and the second vessel is attached to the portion of the outer surface of the body via adhesives (see figure above); the second vessel has a hole and the body is positioned over the hole as a "cap"; wherein a balloon catheter is used;

(claim 32 and 33) Roy is silent with regards to when the hole is formed. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to either have the hole formed subsequent to attaching the portion of the second vessel to the body or prior to attaching the portion of the second vessel to the body since a hole must necessarily formed in order to create an end-to-side anastomosis and that the step of when the hole is formed would be a mere design choice.

(claims 42 and 43) The blood flows intraluminally through the first and second vessels.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roy et al. in view Iyer et al, as applied to claim 1 above, and in further view of US 6,019,788 to Butters et al.

The device of Roy, as modified by Iyer, discloses all the limitations of the claim except for the body being disk-shaped. However, Butters discloses that an anastomosis support graft can have various shapes, such as the shape shown in Fig. 3 which is similar to the device of Roy, or to a disk-shaped device as shown in Fig. 19. Therefore, it would have been an obvious matter of design choice to modify the device of Roy to be disk-shaped because Butters discloses that it is well known in the art for support devices to have various shapes, including disk-shaped. Furthermore, it has been held that changing the shape of a working part involves only routine skill in the art. *In re Dailey*; 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darwin P. Erez whose telephone number is (571)272-4695. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on (571) 272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Darwin P. Erezol/
Primary Examiner, Art Unit 3773